Remarks

Claims 17-36 were pending in the Application. In the Advisory Action dated February 23, 2004 the Examiner maintained her rejection of all the pending claims. Applicant respectfully traverses the rejections. The independent pending claims are 17, 27 and 32.

Preliminary Matters

Initially it is pointed out that the Examiner did not address the fact that several IDS' that have been submitted by the Applicant do not have all of the references initialed by the Examiner. In summary the Examiner has not initialed references identified as BA on the 6/19/01 1449; BB-BC on the 8/7/01 1449; or AM or CA-CB on the 1/8/03 1449. The Applicant assumes that the Examiner has considered all the references as the references were provided to the Examiner and the Examiner did sign the 1449s. However, the Applicant requests confirmation/clarification from the Examiner. That is, the Applicant requests that the Examiner initial the references on the 1449s not initialed if they have been considered by the Examiner. If the references have not yet been considered, the Applicant respectfully requests the Examiner consider the references and resubmit the appropriate 1449s with all references initialed.

In the Advisory Action, the Examiner initially notes that the claims recite "less then" instead of "less than" and noted that this should have been a 35 USC 112, 2nd paragraph rejection. The Applicant initially thanks the Examiner for pointing out this informality (typo). The Applicant has amended claims 17 and 27 to correct the informality and overcome a potential 35 USC 112, 2nd paragraph rejection. The Applicant accordingly submits that the potential 35 USC 112, 2nd paragraph rejection has been overcome.

The Applicant has amended independent claim 32 to include the limitations of dependent claim 33 (namely transmitting advertisements at a bandwidth less than the bandwidth required to present the advertisement in real time) and has canceled claim 33. With this amendment, all of the independent claims (17, 27 and 32) include the limitation of transmitting advertisements at a

bandwidth less than the bandwidth required to present the advertisement in real time. The Applicant submits that these claims and those that depend therefrom are patentable over the art of the record for at least the reason that none of the cited references disclose, teach, or suggest this limitation and for the further features recited therein.

Bandwidth less than the bandwidth required to present the advertisement in real time

It appears to the Applicant that the Examiner may not fully understand this limitation. For example, one of the Examiners arguments appears to be that since more than one ad channel are contained within a 6 MHz carrier frequency (channel) that the ad channels are being delivered at a bandwidth less than the bandwidth required to present the advertisements in real time. In a digital communications stream, such as that illustrated in FIG. 3 of the current application, multiple channels may be transmitted within a single 6 MHz frequency carrier (channel). These channels each occupy a portion (e.g., a dedicated high bandwidth channel) of the overall available bandwidth. Even though these dedicated high bandwidth channels do not use the entire bandwidth of the frequency carrier they are transmitted with enough bandwidth to be displayed in real time.

In addition to dedicated high bandwidth channels, low bandwidth channels can be included within the frequency carrier. FIG. 4 of the current application illustrates examples of low bandwidth channels. These channels are used to download data that is not needed in real time because the bandwidth provided does not support real-time use. These channels can be used to store data for later use. The low bandwidth channels utilize bandwidth that may have otherwise been wasted. FIG. 4A illustrates a dedicated low bandwidth channel and FIG. 4B illustrates a variable rate low bandwidth channel that utilizes bandwidth that is not used by the system (e.g., remaining after the high bandwidth channels are delivered).

The current invention utilizes low bandwidth channels to deliver advertisements to the STB for later display. These advertisements are delivered at a bandwidth that is less than the bandwidth required to present in real time.

Response to Advisory Action

The Examiner asserts that *Hendricks et al.* disclose the advertisements being transmitted at a bandwidth less than the bandwidth required to present the advertisement in real time, as required by the independent claims (17, 27 and 32 (was dependent claim 33)). The Applicant respectfully disagrees.

In support of the Examiners assertion the Examiner states that "[t]he bandwidth of feeder channels is considered to be low bandwidth because 'available feeder channels maybe shared across several program channels (inherency applied), and their allocation must be managed and optimized' since the advertisements just need some breaks along the programs to be inserted at some frequency intervals of times, not all the time (see col. 5/lines 29-51). The Applicant assumes that the Examiner is attempting to illustrate that since the feeder channels allocation is managed (shared across several program channels) that the ads being transmitted at a low bandwidth (less than the bandwidth required to present the advertisement in real time). The Applicant submits that an assumption such as that noted above would be erroneous. Moreover, the Applicant respectfully submits that regardless of the exact reading by the Examiner of this section, there is clearly no disclosure, teaching or suggestion of transmitting advertisements at a bandwidth less than the bandwidth required to present the advertisement in real time, as required by the independent claims.

To the contrary, the Applicant respectfully submits that this passage simply discloses that the feeder channels include ads that can be displayed during pods (in place of the default ads by switching to an appropriate feeder channel) in multiple program streams. "[T]he maximum number of spots available for a given program break will depend on the total number of feeder channels available and the alignment of program breaks across all program channels ... force program breaks to line up ...". For example, if the pods were aligned in multiple program streams it would be possible to use the same feeder channel to provide a targeted ad for each. For example, assume that a first program stream (channel 1) and has a pod at 10:30, a second program stream (channel 2) and also has a pod at 10:30, a first feeder channel (channel 99) has ads targeted for group 1 at 10:30, and a STB for a particular subscriber is assigned to group 1. At

10:30, the STB would be directed to switch from channel 1 or channel 3 to channel 99 during the 10:30 pod.

For at least the reasons addressed above, this argument advanced by the Examiner and this section of *Hendricks et al.* do not disclose, teach or suggest transmitting advertisements at a bandwidth less than the bandwidth required to present the advertisement in real time, as required by the independent claims.

The Examiner further asserts that "[t]he commercial channels as illustrated in Figure 32 shows a 6MHz bandwidth allocation method and technique of additional bandwidth allocation, if one needs more bandwidth (col. 73/lines13-54). Clearly, one does not need to use all of the 6MHz bandwidth, of course, an ad with 1MHz or 2MHz bandwidth can be transmitted on that channel for sure. Therefore, the step of 'the advertisements are transmitted at a bandwidth less than the bandwidth required to present the advertisement in real time' is met for these reasons". The Applicant assumes that the Examiner is attempting to illustrate that since an ad need not use an entire 6MHz allocation that the ads may be transmitted at a bandwidth less than the bandwidth required to present the advertisement in real time.

The Applicant submits that an assumption such as that noted above would be erroneous. Initially, the Applicant points out that a digital feeder channel will be transmitted at less than 6 MHz as it will be one of multiple channels that are compressed so as to be delivered within that frequency carrier. As one skilled in the art knows, digital delivery of program streams enables additional channels (such as the feeder channels) to be delivered in the frequency spectrum associated with television communications. Moreover, the Applicant respectfully submits that regardless of the exact reading by the Examiner of this section, there is clearly no disclosure, teaching or suggestion in this section of transmitting advertisements at a bandwidth less than the bandwidth required to present the advertisement in real time, as required by the independent claims.

To the contrary, the Applicant respectfully submits that this passage discloses that the STB can switch to an appropriate feeder channel during a pod in one of two embodiments. The first embodiment (represented in Fig. 33) is that a selected feeder channel is transmitted to the

STB within the same 6 MHz frequency carrier (channel) as the programming (that is multiple digital channels are compressed within one 6 MHz frequency carrier). When a commercial break occurs the STB selects the appropriate feeder channel within the 6 MHz frequency carrier for decompression (in effect switches to that channel). As this switching of channels is done in real (or near real) time the advertisements are clearly being transmitted at a bandwidth necessary to display them in real time.

The second embodiment (represented in Fig. 34) is that a selected feeder channel is not in the same 6 MHz frequency carrier as the program so that the STB needs to switch to the new frequency carrier and then decompress the appropriate feeder channel therefrom. This embodiment may entail a slight delay in the presentation of the targeted advertisement while the STB tunes to the new frequency carrier. However, as with the first embodiment, the switching of channels is done in real (or near real) time so that the advertisements are clearly being transmitted at a bandwidth necessary to display them in real time.

For at least the reasons addressed above, this argument advanced by the Examiner and this section of *Hendricks et al.* do not disclose, teach or suggest transmitting advertisements at a bandwidth less than the bandwidth required to present the advertisement in real time, as required by the independent claims.

The Examiner further argues that *Hendricks et al.* teach "that the advertisements need not be in real-time all of the time, and the target advertisements can be stored in the set top terminal or either broadcasting directly from the operations center of the cable headend" (see col. 3 lines 45-67). The Applicant submits that while this section does disclose an alternative embodiment where the targeted ads may be broadcast to the STB and stored therein, it does not disclose, teach or suggest transmitting advertisements at a bandwidth less than the bandwidth required to present the advertisement in real time, as required by the independent claims.

For at least the reasons addressed above, this argument advanced by the Examiner and this section of *Hendricks et al.* do not disclose, teach or suggest transmitting advertisements at a bandwidth less than the bandwidth required to present the advertisement in real time, as required by the independent claims.

Claim Arguments

Independent claim 17 is directed to a method for delivering advertisements to subscribers in advance of presentation of the advertisements to the subscribers. The method includes transmitting advertisements to subscribers over an advertisement channel. The advertisements are transmitted at a bandwidth that is less then the bandwidth required to present the advertisements in real time. Accordingly the advertisements are transmitted in advance of presentation of the advertisements to the subscribers and are stored in a storage medium.

The Applicant submits that *Hendricks et al.* do not disclose, teach or suggest (in the sections noted by the Examiner in the final rejection or the advisory action or the entire disclose for that matter) transmitting advertisements to subscribers at a bandwidth that is less then the bandwidth required to present the advertisements in real time (as required by claim 17. To the contrary, *Hendricks et al.* disclose delivering targeted advertising to subscribers in one of four methods: (1) multiple channel method, (2) storage method, (3) additional bandwidth method, and (4) split screen method (see col. 72, line 64 – col. 73, line 1).

The multiple channel method includes using a plurality of feeder channels to provide alternative advertisements to a subscriber for a particular program(s) and selecting a targeted advertisement from the alternative advertisements for the subscriber. The targeted advertisement is displayed to the subscriber by having the STB switch to the appropriate advertisement channel during the advertisement break (see col. 73, line 1 – col. 74, line 3). Clearly these ads are being transmitted in real time at the bandwidth that is necessary to display them in real time. Accordingly, the multiple channel method teaches away from delivering targeted ads to the STB at a bandwidth that is less then the bandwidth required to present the advertisements in real time, as required by claim 17.

The storage method discloses that a certain number of targeted ads are stored in the STB and that ads selected for targeting are retrieved (see col. 74, lines 4-16). There is no disclosure of how the ads were delivered to and/or stored in the STB. The disclosure simply states that an additional feeder channel is not needed to continuously broadcast ads. Clearly there is no

disclosure of the ads being delivered to the STB at a bandwidth that is less then the bandwidth required to present the advertisements in real time, as required by claim 17.

The additional bandwidth method includes selecting targeted advertisements for each subscriber and then transmitting the targeted advertisements directly to each subscriber (see col. 74, lines 17-32). *Hendricks et al.* disclose that this method requires a great deal of available bandwidth. Clearly there is no disclosure of the ads being delivered to the STB at a bandwidth that is less then the bandwidth required to present the advertisements in real time, as required by claim 17.

The split screen method includes multiple targeted advertisements being transmitted to a subscriber in a single channel. The STB selects the appropriate targeted advertisement and utilizes either masking or scaling to display the appropriate targeted advertisement. Clearly these ads are being transmitted in real time at the bandwidth that is necessary to display them in real time. Accordingly, the split screen method teaches away from delivering targeted ads to the STB at a bandwidth that is less then the bandwidth required to present the advertisements in real time, as required by claim 17.

For at least these reasons it is submitted that claim 17 is patentable over *Hendricks et al.* Claims 18-26 depend from claim 17 and are therefore submitted to be patentable over *Hendricks et al.* for at least the reasons described above with respect to claim 17 and for the further features recited therein. The rejection of claims 17-26 accordingly should be withdrawn.

Independent claim 27 is directed to a system for delivering advertisements to subscribers in advance of presentation of the advertisements to the subscribers. The system includes a transmitter for transmitting the advertisements to the subscribers over an advertisement channel, wherein the advertisements are transmitted at a bandwidth that is less then the bandwidth required to present the advertisements in real time, and are accordingly transmitted in advance of presentation of the advertisements to the subscribers. A storage medium stores the advertisements. A display device interface allows the advertisements to be presented to the subscribers.

It is submitted that claim 27 is patentable over *Hendricks et al.* for at least reasons similar to those described above with respect to claim 17 (e.g., that there is no disclosure, teaching or suggestion of the transmitter as recited in claim 27). Claims 28-31 depend from claim 27 and are therefore submitted to be patentable over *Hendricks et al.* for at least the reasons described above with respect to claim 27 and for the further features recited therein. Accordingly the rejection of claims 27-31 should be withdrawn

Independent claim 32 is directed to a method for delivering advertisements to subscribers in advance of presentation of the advertisements to the subscribers. The method includes forming a subgroup of subscribers that share one or more common subscriber characteristics. Targeted advertisements are selected to be transmitted to the subgroup. The targeted advertisements are transmitted to the subgroup over an advertisement channel, wherein the targeted advertisements are transmitted in advance of presentation of the targeted advertisements to the subscribers at a bandwidth that is less than the bandwidth required to present the targeted advertisements in real time. The targeted advertisements are stored in a storage medium.

It is submitted that claim 32 is patentable over *Hendricks et al.* for at least reasons similar to those described above with respect to claim 17. Claims 34- 36 depend from claim 32 and are therefore submitted to be patentable over the cited references for at least the reasons described above with respect to claim 32 and for the further features recited therein. Accordingly the rejection of claims 32 and 34-36 should be withdrawn.

Conclusion

For the foregoing reasons, Applicant respectfully submits that claims 17-32 and 34-36 are in condition for allowance. Accordingly, early allowance of claims 17-32 and 34-36 is earnestly solicited.

If the Examiner believes that a conference would be of value in expediting the prosecution of this Application, the Examiner is hereby invited to contact the undersigned attorney to set up such a conference. As this Application is under Final Rejection, the Applicant would welcome the Examiner to call the undersigned to discuss.

Respectfully submitted,

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